

and Wisconsin; and on 1 to 4 in Alabama, Arkansas, Connecticut, Georgia, Indian Territory, Kentucky, Maine, Maryland, Massachusetts, Mississippi, Montana, New Hampshire, New Jersey, North Carolina, North Dakota, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, and West Virginia.

West of the Rocky Mountains thunderstorms were reported in Arizona on the 1st, 7th, 8th, 27th, 28th, and 29th; in California on the 1st, 4th to 8th, 10th, 14th, 15th, 16th, 26th, 27th, and 28th; in Nevada on the 6th; in New Mexico on the 19th, 20th, 28th, 29th, and 30th; in Oregon on the 10th and 15th; in Utah on the 1st, 9th, 11th, 16th, and 31st; and in Washington on the 8th and 10th. No thunderstorms were reported in Delaware, the District of Columbia, Idaho, and Wyoming.

## AURORAS.

The more widely observed auroral displays of the month were reported from New England to Washington and southward to the middle Rocky Mountain region on the 12th; from the Lake region to Washington and in the middle Rocky Mountain and plateau regions on the 13th; from New England to the Dakotas and to southern Illinois on the 17th; from the Lake region to the Dakotas and middle Rocky Mountain region on the 18th; and from the Lake region over the Missouri Valley and northern plateau region on the 21st.

## Notable auroral displays of October, 1892.

Date.	Station.	Extent of display.		Remarks.
		Azimuth.	Altitude.	
2	Erie, Pa. ....	Cov'd 135	45	Flashes of light.
11	Northfield, Vt. ....	165 to 225	20	White light.
12	Eastport, Me. ....	.....	25	Waves of light moving rapidly from west to east.
12	Marquette, Mich. ....	120 to 240	75	An arch, which gave way to a diffused pale green light, with broad flashing beams.
12-13	Fort Buford, N. Dak. ....	135 to 250	40	Irregular arch, with brilliant streamers.
12	Havre, Mont. ....	.....	60	An arch, with beams of light.
12	Helena, Mont. ....	Cov'd 90	30	Yellow light, with beams.
12	Miles City, Mont. ....	.....	30	An arch, with "merry dancers."
13	Marquette, Mich. ....	135 to 180	45	Faint arch.
15	Moorhead, Minn. ....	.....	.....	Dark segment, with shafts of yellow light.
17	Eastport, Me. ....	.....	35	An arch, with beams and waves of brilliant light.
17	Northfield, Vt. ....	160 to 225	36	White light, with streamers.
17	Malone, N. Y. ....	.....	.....	Double arch, with streamers to zenith.
17	Miles City, Mont. ....	.....	60	"Merry dancers."
18	Alpena, Mich. ....	90 to 180	30	Beams of white light, with a lateral movement from west to east.
17-18	Cheboygan, Mich. ....	.....	70	Brilliant streamers.
18	Grand Haven, Mich. ....	135 to 225	15	White arch, with pale streamers.
18	Marquette, Mich. ....	135 to 225	30	Obscured by clouds.
18	Sault Ste. Marie, Mich. ....	135 to 270	40	Tea-green color, with yellow beams moving from west to east.
18	Juneau, Wis. ....	145 to 240	14	With streamers.
18	Saint Paul, Minn. ....	170 to 200	40	Pale light.
21-22	Helena, Mont. ....	In the n.	30	Pale yellow light, with beams.

## STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for October, 1892, of the directors of the various state weather services:

## ALABAMA.

*Temperature.*—Maximum, 94, at Daphne, 3d and 6th; minimum, 28, at Florence and Scottsboro, 28th; greatest monthly range, 61, at Brewton; least monthly range, 35, at Fayette.

*Precipitation.*—Greatest monthly, 3.03, at Mobile; least monthly, 0.00, at Gadsden.—*P. H. Mell, Observer, Weather Bureau, Auburn, director.*

## ARIZONA.

*Temperature.*—Maximum, 110, at Fort Mohave, 5th; minimum, 22, at Whipple Barracks, 17th; greatest monthly range, 72, at San Carlos; least monthly range, 41, at Dos Cabezas.

*Precipitation.*—Greatest monthly, 1.83, at Walnut Ranch; least monthly, 0.00, at Fort Mohave, Gila Bend, Rancho del Pueblo, and Yuma.

*Wind.*—Prevailing direction, southwest.—*J. C. Hayden, Observer, Weather Bureau, Tucson, director.*

## ARKANSAS.

*Temperature.*—The mean was 2.5 above the normal; maximum, 92, at Keesees Ferry, 3d, and at Hot Springs and Texarkana, 7th; minimum, 27, at Melbourne, 26th and 27th; greatest monthly range, 63, at Keesees Ferry and Hot Springs; least monthly range, 39, at Mount Nebo.

*Precipitation.*—The average was 1.34 above the normal; greatest monthly, 9.07, at Dallas; least monthly, 0.43, at Black Rock.

*Wind.*—Prevailing direction, south.—*M. F. Locke, Commissioner of Agriculture, Little Rock, director; F. H. Clarke, Local Forecast Official, Weather Bureau, assistant.*

## CALIFORNIA.

*Temperature.*—Maximum, 103, at Needles, 3d; minimum, 26, at Susanville, 17th; greatest monthly range, 70, at Winchester; least monthly range, 31, at Berkeley.

*Precipitation.*—Greatest monthly, 5.84, at Crescent City; least monthly, 0.00, at Needles and Winchester.

*Wind.*—Prevailing directions; west and northwest.—*J. A. Barwick, Observer, Weather Bureau, Sacramento, director.*

## COLORADO.

*Temperature.*—The mean was about normal, except in the central and northwestern tiers of counties where it was about 4.0 below; maximum, 97, at Crook, 4th; minimum, —4, at San Luis, 14th; greatest monthly range, 83, at Delta; least monthly range, 49, at Glen Eyrie.

*Precipitation.*—The average was greatly above the normal; greatest monthly, 4.30, at Climax; least monthly, 0.00, at a number of stations.—*J. J. Gilligan, Observer, Weather Bureau, Denver, director.*

## FLORIDA.

*Temperature.*—Maximum, 91, at Bristol, 2d; minimum, 36, at Orange City, 29th; greatest monthly range, 54, at Orange City; least monthly range, 28, at Key West.

*Precipitation.*—Greatest monthly, 14.00, at Jupiter; least monthly, 1.28, at Pensacola.

*Wind.*—Prevailing direction, northeast.—*E. R. Demain, Observer, Weather Bureau, Jacksonville, director.*

## GEORGIA.

*Temperature.*—Maximum, 90, at Darien, 13th, at Eastman, 8th, at Thomasville, 2d, and at Lagrange, 17th, 18th, and 19th; greatest monthly range, 60, at Lagrange; least monthly range, 32, at Macon.

*Precipitation.*—Greatest monthly, 2.11, at Blakely; least monthly, 0.00, at Lafayette and Hawkinsville.

*Wind.*—Prevailing direction, east.—*Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.*

## IDAHO.

*Temperature.*—Maximum, 97, at Payette, 1st, and at Boise Barracks, 3d; minimum, 15, at Lake, 20th; greatest monthly range, 66, at Payette; least monthly range, 60, at Boise Barracks.

*Precipitation.*—Greatest monthly, 0.77, at Boise Barracks; least monthly, 0.15, at Lake.

*Wind.*—Prevailing direction, southwest.—*J. H. Smith, Observer, Weather Bureau, Idaho Falls, director.*

## ILLINOIS.

*Temperature.*—The mean was 1.5 above the normal of the last 17 years; maximum, 94, at Muddy Valley, 1st; minimum, 13, at Philo, 30th.

*Precipitation.*—The average was 1.97 below the normal of the last 14 years; greatest monthly, 2.74, at Saint Johns; least monthly, trace, at Decatur.

*Wind.*—Prevailing direction, northwest.—*John Craig, Observer, Weather Bureau, Springfield, director.*

## INDIANA.

*Temperature.*—The mean was 1.4 above the normal; maximum, 91, at Marengo, 3d; minimum, 15, at Marion, 30th; greatest monthly range, 65, at Marion; least monthly range, 28, at Irvington.

*Precipitation.*—The average was 1.61 below the normal; greatest monthly, 3.00, at Michigan City; least monthly, trace, at Point Isabel and Marion.

*Wind.*—Prevailing direction, southwest.—*Prof. H. A. Huston, Lafayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.*

## IOWA WEATHER AND CROP SERVICE.

**Temperature.**—The mean was 2.0 above the normal; maximum, 96, at Atlantic, 1st; minimum, 14, at Atlantic, 25th; greatest monthly range, 82, at Atlantic; least monthly range, 47, at Fort Madison.

**Precipitation.**—The average was 1.40 below the normal; greatest monthly, 2.58, at Maxon; least monthly, 0.00, at Bancroft.

**Wind.**—Prevailing direction, south.—*J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.*

## KANSAS.

**Temperature.**—The mean was 1.9 above the normal; maximum, 99, at Moreland, 6th; minimum, 11, at Shields, 31st; greatest monthly range, 77, at Shields; least monthly range, 50, at Salina.

**Precipitation.**—The average was 0.05 below the normal; greatest monthly, 3.94, at Sedan; least monthly, trace, at Collyer, Grainfield, and Grinnell.

**Wind.**—Prevailing direction, south.—*Prof. J. T. Lovewell, Topeka, director; T. B. Jennings, Observer, Weather Bureau, assistant.*

## LOUISIANA.

**Temperature.**—Maximum, 96, at Clinton, 4th and 12th, and at Cameron, 8th; minimum, 29, at Davis, 25th; greatest monthly range, 62, at Rayne; least monthly range, 31, at Port Eads.

**Precipitation.**—The average was 0.57 below the normal; greatest monthly, 7.70, at Lawrence; least monthly, 0.04, at Amite.

**Wind.**—Prevailing direction, south.—*R. E. Kerkam, Local Forecast Official, Weather Bureau, New Orleans, director.*

## MARYLAND.

Crops were damaged by drought in all sections of the state.

**Temperature.**—Maximum, 84, at Boettcherville and Solomons, 1st; minimum, 26, at Woodstock, 31st; greatest monthly range, 54, at Boettcherville and Seaford, Del.; least monthly range, 43, at New Market.

**Precipitation.**—Greatest monthly, 1.13, at Leonardtown; least monthly, 0.00, at Taneytown.

**Wind.**—Prevailing direction, northwest.—*Dr. William B. Clark, Johns Hopkins University, Baltimore, director; Prof. Milton Whitney, Maryland Agricultural College, secretary and treasurer; C. P. Cronk, Observer, Weather Bureau, in charge.*

## MICHIGAN.

**Temperature.**—The mean was 2.1 above the normal; maximum, 83, at Grand Rapids, 14th, and at Mottville, 3d; minimum, 8, at McMillan, 31st; greatest monthly range, 70, at McMillan; least monthly range, 30, at Arbelia.

**Precipitation.**—The average was 1.78 below the normal; greatest monthly, 4.49, at Rockland; least monthly, 0.11, at North Marshall.

**Wind.**—Prevailing direction, northwest.—*E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.*

## MINNESOTA.

**Temperature.**—Maximum, 90, at Granite Falls and Blooming Prairie, 2d; minimum, 11, at Eagle Bend, 25th; greatest monthly range, 76, at Granite Falls; least monthly range, 53, at Pine River Dam.

**Precipitation.**—Greatest monthly, 2.49, at Grand Meadow; least monthly, 0.00, at Granite Falls.

**Wind.**—Prevailing direction, northwest.—*J. H. Harmon, Observer, Weather Bureau, Minneapolis, director.*

## MISSISSIPPI.

**Temperature.**—The mean was 1.0 above the normal; maximum, 97, at Vaiden, 3d; minimum, 25, at Vaiden, 26th; greatest monthly range, 72, at Vaiden; least monthly range, 37, at Ship Island.

**Precipitation.**—The average was 2.19 below the normal; greatest monthly, 4.20, at Moss Point; least monthly, 0.00, at a number of stations.

**Wind.**—Prevailing direction, southeast.—*R. B. Fulton, Observer, Weather Bureau, University, director.*

## NEBRASKA.

**Temperature.**—Maximum, 96, at Agee, 1st; minimum, 12, at Ansley, 29th; greatest monthly range, 76, at Ansley, Agee, and Lexington; least monthly range, 40, at Ericson.

**Precipitation.**—Greatest monthly, 5.80, at Hay Springs; least monthly, trace, at Haigler.

**Wind.**—Prevailing direction, south.—*Prof. Goodwin D. Swozey, Crete, director; G. A. Loveland, Observer, Weather Bureau, assistant.*

## NEVADA.

**Temperature.**—The mean was 1.0 below the normal; maximum, 91, at Pioche, 4th; minimum, 2, at Sunnyside, 21st.

**Precipitation.**—The average was 0.18 below the normal; greatest monthly, 1.11, at Virginia City; least monthly, 0.00, at Palisade and Beowawe.

**Wind.**—Prevailing direction, southwest.—*Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.*

## NEW ENGLAND.

**Temperature.**—The mean was 0.5 below the normal; maximum, 84, at Lynn (b), 14th; minimum, 20, at West Milan, 12th, and at Calais and Houlton, 13th; greatest monthly range, 58, at Lake Cochituate; least monthly range, 26, at Nantucket.

**Precipitation.**—The average was 2.37 below the normal; greatest monthly, 2.81, at Littleton; least monthly, trace, at North Woodstock.

**Wind.**—Prevailing direction, northwest.—*J. Warren Smith, Observer, Weather Bureau, Boston, director.*

## NEW MEXICO.

**Temperature.**—Maximum, 92, at Los Lunas, 1st; minimum, 9, at Halls Peak, 18th; greatest monthly range, 78, at Chama; least monthly range, 39, at La Luz.

**Precipitation.**—Greatest monthly, 2.80, at Los Lunas; least monthly, 0.17, at Coolidge.

**Wind.**—Prevailing direction, east.—*H. B. Hersey, Observer, Weather Bureau, Santa Fe, director.*

## NEW YORK.

The month was characterized by light precipitation, especially in the east and southeast parts of the state.

**Temperature.**—The mean was 0.3 above the normal; maximum, 82, at Fleming and Watkins, 1st; minimum, 22, at Malone, 12th; greatest monthly range, 54, at Poughkeepsie; least monthly range, 32, at Arkwright.

**Precipitation.**—The average was 2.00 below the normal; greatest monthly, 5.79, at Little Valley; least monthly, trace, at West Point.

**Wind.**—Prevailing direction, northwest.—*Prof. E. A. Fuertes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Observer, Weather Bureau, assistant.*

## NORTH CAROLINA.

The average rainfall was the least on record for October.

**Temperature.**—The mean was 1.5 below the normal; maximum, 91, at Rockingham, 1st; minimum, 20, at Bakersville, 31st; greatest monthly range, 68, at Bakersville; least monthly range, 31, at Hatteras.

**Precipitation.**—The average was 3.05 below the normal; greatest monthly, 2.74, at Hatteras; least monthly, trace, at Lenoir.

**Wind.**—Prevailing direction, northeast.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.*

## NORTH DAKOTA.

**Temperature.**—The mean was 5.0 above the normal; maximum, 95, at Medora, 4th; minimum, 7, at Woodbridge, 29th; greatest monthly range, 85, at Woodbridge; least monthly range, 58, at Jamestown and Saint John.

**Precipitation.**—The average was 0.97 below the normal; greatest monthly, 2.89, at Fort Yates; least monthly, 0.06, at Minto and University.

**Wind.**—Prevailing direction, northwest.—*W. H. Fallon, Observer, Weather Bureau, Bismarck, director.*

## OHIO.

**Temperature.**—The mean was 1.0 above the normal; maximum, 89, at Marion, 3d; minimum, 20, at Van Wert, 30th; greatest monthly range, 68, at Marion; least monthly range, 41, at Harbor.

**Precipitation.**—The average was 1.73 below the normal; greatest monthly, 2.43, at Bissell; least monthly, 0.11, at Greenville.

**Wind.**—Prevailing direction, northwest.—*Prof. B. F. Thomas, Columbus, director; C. M. Strong, Observer, Weather Bureau, secretary and assistant.*

## OKLAHOMA.

**Temperature.**—Maximum, 98, at Buffalo, 1st, and at Lehigh, 3d; minimum, 28, at Keokuk Falls, 25th; greatest monthly range, 68, at Buffalo; least monthly range, 31, at Kingfisher.

**Precipitation.**—Greatest monthly, 10.25, at South McAlester; least monthly, 1.85, at Fort Supply.

**Wind.**—Prevailing direction, south.—*J. I. Widmeyer, Observer, Weather Bureau, Oklahoma City, director.*

## OREGON.

**Temperature.**—The mean was 0.9 above the normal; maximum, 93, at New Bridge, 2d; minimum, 14, at Fife, 26th; greatest monthly range, 78, at New Bridge; least monthly range, 37, at Astoria.

**Precipitation.**—The average was 0.62 below the normal; greatest monthly, 6.32, at Glenora; least monthly, 0.21, at Vale.

**Wind.**—Prevailing direction, southwest.—*Hon. H. E. Hayes, Master State Grange, Portland, director; B. S. Pague, Local Forecast Official, Weather Bureau, assistant.*

## PENNSYLVANIA.

**Temperature.**—The mean was 1.4 below the normal; maximum, 83, at Coatesville, 1st; minimum, 16, at Wellsboro, 25th; greatest monthly range, 59, at Wellsboro; least monthly range, 37, at Erie.

**Precipitation.**—The average was 2.44 below the normal; greatest monthly, 2.93, at Saegerstown; least monthly, 0.00, at McConnellsburg.

**Wind.**—Prevailing direction, northwest.—*Under direction of the Franklin Institute, Philadelphia; H. L. Ball, Observer, Weather Bureau, assistant.*

## SOUTH CAROLINA.

**Temperature.**—Maximum, 89, at Trial, 16th; minimum, 27, at Cheraw and Winstboro, 31st.

**Precipitation.**—Greatest monthly, 1.78, at Hardeeville; least monthly, 0.19, at Statesburg.

**Wind.**—Prevailing direction, northeast.—*A. P. Buller, Observer, Weather Bureau, Columbia, director.*

## SOUTH DAKOTA.

**Temperature.**—The mean was 4.4 above the normal; maximum, 98, at Pierre, 1st; minimum, 9, at Brookings, 25th, and at Castlewood, 23d; greatest monthly range, 82, at Brookings; least monthly range, 67, at Gary, Faulkton, Salem, and Wentworth.

**Precipitation.**—The average was 0.19 above the normal; greatest monthly, 3.24, at Rosebud; least monthly, 0.05, at Flandreau.

**Wind.**—Prevailing direction, northwest.—*S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.*

#### TENNESSEE WEATHER AND CROP SERVICE.

**Temperature.**—The mean was 4.0 above the normal; maximum, 89, at Bolivar, 19th; minimum, 22, at Springdale, 30th; greatest monthly range, 66, at Springdale; least monthly range, 25, at Lookout Mountain.

**Precipitation.**—The average was 2.16 below the normal; greatest monthly, 1.18, at Covington; least monthly, 0.00, at Parksville, the only station reporting no rainfall for October during the last 10 years.

**Wind.**—Prevailing direction, north.—*J. B. Marbury, Local Forecast Official, Weather Bureau, Nashville, director.*

#### TEXAS.

**Temperature.**—The mean was 1.2 above the normal; maximum, 100, at College Station, 5th; minimum, 29, at Fort Hancock, 26th; greatest monthly range, 67, at Fort Hancock; least monthly range, 36, at Orange and Galveston.

**Precipitation.**—The average was 0.69 above the normal; greatest monthly, 8.56, at Gainesville; least monthly, 0.22, at El Paso.

**Wind.**—Prevailing direction, southeast.—*D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.*

#### UTAH.

**Temperature.**—Maximum, 92, at Fillmore, 5th and 6th; minimum, 7, at Parowan, 12th; greatest monthly range, 74, at Thistle; least monthly range, 40, at Grouse Creek.

**Precipitation.**—Greatest monthly, 2.32, at Parowan; least monthly, 0.00, at Stockton.—*G. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.*

#### VIRGINIA.

**Temperature.**—Maximum, 88, at Nottoway, 1st; minimum, 22, at Dale

Enterprise, 27th; greatest monthly range, 61, at Nottoway; least monthly range, 37, at Mossing Ford.

**Precipitation.**—Greatest monthly, 0.73, at Nottoway; least monthly, 0.04, at Lynchburg.

**Wind.**—Prevailing direction, northwest.—*Dr. E. A. Craighill, Lynchburg, director; J. N. Ryker, Observer, Weather Bureau, assistant.*

#### WEST VIRGINIA.

The month was very dry.

**Temperature.**—Maximum, 89, at Point Pleasant, 18th; minimum, 24, at Davis, 29th, and at Buckhannon, 6th; greatest monthly range, 62, at Point Pleasant; least monthly range, 44, at Martinsburg.

**Precipitation.**—Greatest monthly, 1.45, at Grafton; least monthly, 0.21, at Martinsburg.

**Wind.**—Prevailing direction, west.—*W. W. Dent, Observer, Weather Bureau, Parkersburg, director.*

#### WISCONSIN.

**Temperature.**—The mean was above the normal, except in a few south-central counties; maximum, 88, at Harvey, 14th; minimum, 14, at Black River Falls, 30th.

**Precipitation.**—Greatest monthly, 3.50, at Embarrass; least monthly, 0.05, at Cadiz.—*W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.*

#### WYOMING.

**Temperature.**—Maximum, 92, at Wheatland, 1st; minimum, 10, at Evans-ton, 20th; greatest monthly range, 71, at Camp Pilot Butte; least monthly range, 52, at Fort Yellowstone.

**Precipitation.**—Greatest monthly, 2.35, at Lusk; least monthly, 0.00, at Lander.

**Wind.**—Prevailing direction, northwest.—*E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.*

### METEOROLOGICAL TABLES.

*Meteorological record of Army post surgeons, voluntary, and other co-operating observers, October, 1892.*

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.	
<b>Alabama.</b>	°	°	°	Inch.
Alco	87	33	66.4	0.11
Bermuda*†	84	33	64.8	0.11
Brewton†	92	31	72.2	1.00
Carrollton*†	84	33	63.8	0.10
Citronelle†	84	42	68.4	1.34
Clairborne Landing†				0.75
Cordova†				0.11
Daphne†	94	41	70.0	1.78
Decatur†				0.29
Decatur b†	84	25	59.6	0.30
Eufaula†	86	34	67.0	0.59
Evergreen†	85	32	66.2	0.75
Florence†				0.25
Florence b†	86	28	62.6	0.21
Fort Deposit†	86	32	67.4	0.60
Gadsden†				0.00
Geneva†	87	36	67.1	1.10
Greensboro†	86	35	65.0	0.23
Healing Springs†	84	29	63.6	2.46
Highland Home†	85	35	66.9	0.86
Livingston†	84	34	63.5	0.18
Lynn†				0.27
Maysville†	83	37	64.7	0.59
Mount Willing†	85	35	66.4	0.65
Opelika†	85	38	66.5	0.19
Pine Apple†	89	31	64.8	0.85
Pittsboro†	84	39	66.5	0.40
Pushmataha†	82	32	63.3	0.57
Scottsboro†	83	28	61.0	0.30
Selma†				0.21
Sturdevant†				0.00
Talladega†				0.13
Talladega Falls†				1.30
Tuscaloosa†				0.41
Tusculum b†	83	32	61.7	0.38
Tusculum b†	85	30	62.1	0.38
Union Springs†	85	32	64.3	0.54
Uniontown†	87	37	66.6	0.19
Valley Head†	82	23	57.6	0.45
Warrior†				0.26
Wilsonville†				0.10
<b>Alaska.</b>				
Metlakatla†	62	29	49.4	18.75
<b>Arizona.</b>				
Ariz. Can. Co. Dam†	102	39	71.2	1.25
Benson*†	88	45	66.8	0.00
Bisbee†	86	39	60.4	1.48
Calabasas†	90	33	61.6	0.94
Casa Grande*†	101	45	72.2	0.15
Dos Cabezas*†	83	42	60.9	1.06
Dragon†				0.37
Dragon Summit*†	85	40	67.4	0.12
Dudleyville†	97	34	66.1	0.65
<b>Arizona—Cont'd.</b>	°	°	°	Inch.
Eagle Pass*†	85	32	58.8	0.64
Florence†	98	34	69.2	1.80
Fort Apache†	87	25	53.6	0.55
Fort Bowie†	90	40	61.9	1.80
Fort Grant†	87	36	62.8	0.46
Fort Huachuca†	91	35	62.4	0.16
Fort Mohave†	110	40	71.3	0.00
Gila Bend a*†	96	54	75.1	0.00
Gila Bend b*†	102	50	76.0	0.00
Lochiel*†	80	35	60.4	0.45
Maricopa*†	105	66	69.5	0.06
Mount Huachuca†	84	37	60.8	0.96
Natural Bridge†				1.50
Navajo Springs†				0.77
Nogales*†	90	32	64.5	0.55
Oracle†	88	39	61.3	1.18
Oro				0.07
Pantano*†	98	50	71.3	1.20
Payson*†	90	30	53.3	0.30
Phoenix a†	100	33	70.5	0.00
Reymert†	91	42	65.8	1.50
San Carlos†	100	28	63.8	0.05
San Simon*†	95	42	66.5	0.59
Show Low				0.70
Signal†	98	37	68.4	0.07
Teviston				0.00
Texas Hill*†	100	50	70.7	0.00
Tucson a†	95	40	68.1	0.32
Tucson b†	93	50	71.3	0.00
Walnut Grove†				1.00
Whipple Barracks†	85	31	59.2	1.83
Wilcox†	84	22	54.0	1.41
Willcox*†	94	48	69.0	0.00
Winslow*†	88	25	56.0	0.55
Yuma*†	102	62	75.8	0.00
<b>Arkansas.</b>				
Arkadelphia†				1.93
Arkansas City†				0.91
Bee Branch†	86	31	62.5	3.54
Black Rock†				0.43
Brinkley†	84	30	62.6	1.48
Camden†				2.31
Camden b†	86	38	65.1	2.05
Conway*†	81	35	61.2	1.63
Dallas†	86	35	63.4	9.07
Dardanelle†				4.88
Eldorado†	86	41	68.6	4.41
Fayetteville†	87	30	59.3	3.99
Forest†	89	31	65.5	1.12
Fulton†				4.52
Gaines Landing†				1.32
Harrison†	81	29	56.5	3.17

*Meteorological record of voluntary observers, &c.—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.	
<b>Arkansas—Cont'd.</b>	°	°	°	Inch.
Helena†	86	38	65.3	5.61
Hope*†	92	29	62.9	5.80
Hot Springs†	92	29	60.9	3.10
Keesees Ferry*†	88	35	63.9	6.24
Kirby†	86	36	66.0	1.81
Lonoke*†				61.8
Madding†	83	29	60.0	2.05
Malvern†	85	27	59.5	2.24
Melbourne†	83		66.0	3.88
Mount Nebo†	86	36	64.8	2.36
New Gascony*†				1.62
Newport†	88	32	63.3	2.15
Newport b†	86	30	61.6	1.30
Ozark†	89	34	64.3	4.60
Pine Bluff†	86	35	66.2	2.58
Prescott†	84	42	66.1	2.50
Rogers†				4.52
Russellville†	88	34	63.0	4.41
Searcy†	82	33	60.8	1.86
Stuttgart†	85	31	63.5	3.25
Texasarkana†	92	36	68.3	5.57
Warm Springs				1.10
Washington b*†	86	38	65.3	5.61
Winslow*†	77	32	61.7	5.55
<b>California.</b>				
Agnew†	89	36	58.7	0.85
Alcalde*†	97	40	66.2	0.21
Almaden*†	91	41	61.0	0.90
Alvarado†	88	35	57.3	1.71
Anaheim†	95	45	65.0	1.91
Antioch*†	88	46	62.8	0.45
Aptos*†	80	37	58.3	1.36
Arcata				2.69
Athlone*†	94	38	69.9	0.18
Auburn†	90	44	64.5	1.76
Bakersfield a*†	92	40	64.8	0.01
Bakersfield b†	95	28	60.8	0.52
Ballast Point L. H.				0.25
Beaumont*†	89	48	62.4	0.00
Belmont*†	80	39	63.4	0.00
Berendo*†	95	50	64.2	0.00
Berkeley	76	45	59.3	1.99
Bishop Creek*†	90	38	59.8	0.20
Boca*†	78	15	41.0	1.50
Borden†	94	40	63.5	0.10
Boulder Creek*†	94	34	60.6	2.20
Brentwood*†	84	42	62.0	1.05
Brighton†	95	40	65.1	1.03
Byron†	92	40	61.7	1.25
Caliente†	85	45	66.4	0.00
Calistoga†	92	34	60.4	1.93
Capitola*†	84	40	60.2	0.60
Castroville*†	77	43	58.5	0.94
<b>California—Cont'd.</b>	°	°	°	Inch.
Centerville*†	91		62.0	1.53
Chico*†	95	38	65.8	0.92
Cisno*†	69	14	43.9	0.95
Claremont†	90	39	64.0	0.09
Colfax*†	87	34	57.4	2.20
Colton*†	98	38	62.8	0.14
Corning*†	89	38	64.3	0.14
Crescent City				5.84
Crescent City L. H.				4.36
Crofton†	95	40	57.1	1.01
Davisville a*†	96	44	64.0	0.51
Davisville b†	94	41	65.5	0.63
Delano†	96	42	64.3	0.32
Delta†	95	35	59.6	3.40
Downey*†	94	44	66.2	0.31
Drytown	91	35	61.0	1.47
Duarte†	99	42	63.0	0.33
Dunnigan†	90	48	69.1	1.12
Dunsmuir*†	83	32	49.2	2.68
East Brother L. H.				0.47
Edgewood†	75	29	47.0	1.07
El Casco*†	93	40	62.7	0.00
Eldorado*†	93	40	61.0	2.04
Elmira*†	93	41	58.5	0.84
El Verano*†	90	40	60.4	1.32
Emigrant Gap*†	65	19	50.7	1.70
Esparto*†	96	30	62.9	0.79
Evergreen				0.89
Exeter*†	95	40	64.8	0.42
Fall Brook*†	96	40	60.5	0.32
Farmington*†	90	34	64.0	0.69
Felton*†	94	30	61.8	1.69
Fernando†	93	39	63.1	0.40
Florence*†	91	47	65.9	0.00
Florin*†	91	31	59.4	0.20
Folsom City a*†	90	40	63.6	1.30
Folsom City b†				1.31
Forestville†	80	35	59.8	2.24
Fort Bidwell	80	24	48.6	1.28
Fresno*†	100	49	69.2	0.32
Fruto*†	95	40	64.1	0.50
Galt*†	96	40	62.6	1.78
Georgetown†	86	32	58.7	3.11
Gilroy†	90	37	61.1	1.19
Girard*†	90	38	56.5	0.33
Glen Ellen*†	91	24	59.7	1.67
Goshen*†	91	40	66.4	0.05
Grass Valley a†				2.72
Grass Valley b†	80	30	53.2	2.61
Haywards*†	80	42	56.8	2.98
Hollister*†	96	35	58.5	0.87
Hornbrook*†	85	32	51.5	0.68
Humboldt L. H.				2.40
Huron*†	90	45	67.7	0.10